

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/589,381  
Source: IFWP  
Date Processed by STIC: 8/22/06

# ***ENTERED***



IFWP

## RAW SEQUENCE LISTING

DATE: 08/22/2006

PATENT APPLICATION: US/10/589,381

TIME: 14:18:29

Input Set : A:\21490Y PCT SL 6 28 06.TXT

Output Set: N:\CRF4\08222006\J589381.raw

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4 <110> APPLICANT: Merck & Co., Inc.
6 <120> TITLE OF INVENTION: POLYPEPTIDES FOR INDUCING A PROTECTIVE
7     IMMUNE RESPONSE AGAINST STAPHYLOCOCCUS AUREUS
10 <130> FILE REFERENCE: 21490Y PCT
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/589,381
C--> 12 <141> CURRENT FILING DATE: 2006-08-15
12 <150> PRIOR APPLICATION NUMBER: 60/545,447
13 <151> PRIOR FILING DATE: 2004-02-18
15 <160> NUMBER OF SEQ ID NOS: 19
17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 260
21 <212> TYPE: PRT
22 <213> ORGANISM: Artificial Sequence
24 <220> FEATURE:
25 <223> OTHER INFORMATION: truncated derivative of sai-1
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30 Val Gln Lys Asp Gly Ser Ser Glu Lys Ser His Met Asp Asp Tyr Met
31 20 25 30
32 Gln His Pro Gly Lys Val Ile Lys Gln Asn Asn Lys Tyr Tyr Phe Gln
33 35 40 45
34 Thr Val Leu Asn Asn Ala Ser Phe Trp Lys Glu Tyr Lys Phe Tyr Asn
35 50 55 60
36 Ala Asn Asn Gln Glu Leu Ala Thr Thr Val Val Asn Asp Asn Lys Lys
37 65 70 75 80
38 Ala Asp Thr Arg Thr Ile Asn Val Ala Val Glu Pro Gly Tyr Lys Ser
39 85 90 95
40 Leu Thr Thr Lys Val His Ile Val Val Pro Gln Ile Asn Tyr Asn His
41 100 105 110
42 Arg Tyr Thr Thr His Leu Glu Phe Glu Lys Ala Ile Pro Thr Leu Ala
43 115 120 125
44 Asp Ala Ala Lys Pro Asn Asn Val Lys Pro Val Gln Pro Lys Pro Ala
45 130 135 140
46 Gln Pro Lys Thr Pro Thr Glu Gln Thr Lys Pro Val Gln Pro Lys Val
47 145 150 155 160
48 Glu Lys Val Lys Pro Thr Val Thr Thr Thr Ser Lys Val Glu Asp Asn
49 165 170 175
50 His Ser Thr Lys Val Val Ser Thr Asp Thr Thr Lys Asp Gln Thr Lys
51 180 185 190
52 Thr Gln Thr Ala His Thr Val Lys Thr Ala Gln Thr Ala Gln Glu Gln
53 195 200 205

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54 Asn Lys Val Gln Thr Pro Val Lys Asp Val Ala Thr Ala Lys Ser Glu
55      210                      215                      220
56 Ser Asn Asn Gln Ala Val Ser Asp Asn Lys Ser Gln Gln Thr Asn Lys
57 225                      230                      235                      240
58 Val Thr Lys His Asn Glu Thr Pro Lys Gln Ala Ser Lys Ala Lys Glu
59                      245                      250                      255
60 Leu Pro Lys Thr
61      260
64 <210> SEQ ID NO: 2
65 <211> LENGTH: 264
66 <212> TYPE: PRT
67 <213> ORGANISM: S. aureus
69 <220> FEATURE:
71 <400> SEQUENCE: 2
72 Met Gly Thr Gln Val Ser Gln Ala Thr Ser Gln Pro Ile Asn Phe Gln
73 1      5      10      15
74 Val Gln Lys Asp Gly Ser Ser Glu Lys Ser His Met Asp Asp Tyr Met
75      20      25      30
76 Gln His Pro Gly Lys Val Ile Lys Gln Asn Asn Lys Tyr Tyr Phe Gln
77      35      40      45
78 Ala Val Leu Asn Asn Ala Ser Phe Trp Lys Glu Tyr Lys Phe Tyr Asn
79      50      55      60
80 Ala Asn Asn Gln Glu Leu Ala Thr Thr Val Val Asn Asp Asp Lys Lys
81 65      70      75      80
82 Ala Asp Thr Arg Thr Ile Asn Val Ala Val Glu Pro Gly Tyr Lys Ser
83      85      90      95
84 Leu Thr Thr Lys Val His Ile Val Val Pro Gln Ile Asn Tyr Asn His
85      100     105     110
86 Arg Tyr Thr Thr His Leu Glu Phe Glu Lys Ala Ile Pro Thr Leu Ala
87      115     120     125
88 Asp Ala Ala Lys Pro Asn Asn Val Lys Pro Val Gln Pro Lys Pro Ala
89      130     135     140
90 Gln Pro Lys Thr Pro Thr Glu Gln Thr Lys Pro Val Gln Pro Lys Val
91 145     150     155     160
92 Glu Lys Val Lys Pro Ala Val Thr Ala Pro Ser Lys Asn Glu Asn Arg
93      165     170     175
94 Gln Thr Thr Lys Val Val Ser Ser Glu Ala Thr Lys Asp Gln Ser Gln
95      180     185     190
96 Thr Gln Ser Ala Arg Thr Val Lys Thr Thr Gln Thr Ala Gln Asp Gln
97      195     200     205
98 Asn Lys Val Gln Thr Pro Val Lys Asp Val Ala Thr Ala Lys Ser Glu
99      210     215     220
100 Ser Asn Asn Gln Ala Val Ser Asp Asn Lys Ser Gln Gln Thr Asn Lys
101 225     230     235     240
102 Val Thr Lys Gln Asn Glu Val His Lys Gln Gly Pro Ser Lys Asp Ser
103      245     250     255
104 Lys Ala Lys Glu Leu Pro Lys Thr
105      260
108 <210> SEQ ID NO: 3

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109 <211> LENGTH: 280
110 <212> TYPE: PRT
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: amino His-tagged construct of SEQ ID NO: 1
116 <400> SEQUENCE: 3
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118 1 5 10 15
119 Arg Gly Ser His Met Gly Thr Gln Val Ser Gln Ala Thr Ser Gln Pro
120 20 25 30
121 Ile Asn Phe Gln Val Gln Lys Asp Gly Ser Ser Glu Lys Ser His Met
122 35 40 45
123 Asp Asp Tyr Met Gln His Pro Gly Lys Val Ile Lys Gln Asn Asn Lys
124 50 55 60
125 Tyr Tyr Phe Gln Thr Val Leu Asn Asn Ala Ser Phe Trp Lys Glu Tyr
126 65 70 75 80
127 Lys Phe Tyr Asn Ala Asn Asn Gln Glu Leu Ala Thr Thr Val Val Asn
128 85 90 95
129 Asp Asn Lys Lys Ala Asp Thr Arg Thr Ile Asn Val Ala Val Glu Pro
130 100 105 110
131 Gly Tyr Lys Ser Leu Thr Thr Lys Val His Ile Val Val Pro Gln Ile
132 115 120 125
133 Asn Tyr Asn His Arg Tyr Thr Thr His Leu Glu Phe Glu Lys Ala Ile
134 130 135 140
135 Pro Thr Leu Ala Asp Ala Ala Lys Pro Asn Asn Val Lys Pro Val Gln
136 145 150 155 160
137 Pro Lys Pro Ala Gln Pro Lys Thr Pro Thr Glu Gln Thr Lys Pro Val
138 165 170 175
139 Gln Pro Lys Val Glu Lys Val Lys Pro Thr Val Thr Thr Thr Ser Lys
140 180 185 190
141 Val Glu Asp Asn His Ser Thr Lys Val Val Ser Thr Asp Thr Thr Lys
142 195 200 205
143 Asp Gln Thr Lys Thr Gln Thr Ala His Thr Val Lys Thr Ala Gln Thr
144 210 215 220
145 Ala Gln Glu Gln Asn Lys Val Gln Thr Pro Val Lys Asp Val Ala Thr
146 225 230 235 240
147 Ala Lys Ser Glu Ser Asn Asn Gln Ala Val Ser Asp Asn Lys Ser Gln
148 245 250 255
149 Gln Thr Asn Lys Val Thr Lys His Asn Glu Thr Pro Lys Gln Ala Ser
150 260 265 270
151 Lys Ala Lys Glu Leu Pro Lys Thr
152 275 280
155 <210> SEQ ID NO: 4
156 <211> LENGTH: 284
157 <212> TYPE: PRT
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: amino His-tagged construct of SEQ ID NO: 2
163 <400> SEQUENCE: 4

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Input Set : A:\21490Y PCT SL 6 28 06.TXT

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164 Met Gly Ser Ser His His His His His Ser Ser Gly Leu Val Pro
165 1 5 10 15
166 Arg Gly Ser His Met Gly Thr Gln Val Ser Gln Ala Thr Ser Gln Pro
167 20 25 30
168 Ile Asn Phe Gln Val Gln Lys Asp Gly Ser Ser Glu Lys Ser His Met
169 35 40 45
170 Asp Asp Tyr Met Gln His Pro Gly Lys Val Ile Lys Gln Asn Asn Lys
171 50 55 60
172 Tyr Tyr Phe Gln Ala Val Leu Asn Asn Ala Ser Phe Trp Lys Glu Tyr
173 65 70 75 80
174 Lys Phe Tyr Asn Ala Asn Asn Gln Glu Leu Ala Thr Thr Val Val Asn
175 85 90 95
176 Asp Asp Lys Lys Ala Asp Thr Arg Thr Ile Asn Val Ala Val Glu Pro
177 100 105 110
178 Gly Tyr Lys Ser Leu Thr Thr Lys Val His Ile Val Val Pro Gln Ile
179 115 120 125
180 Asn Tyr Asn His Arg Tyr Thr Thr His Leu Glu Phe Glu Lys Ala Ile
181 130 135 140
182 Pro Thr Leu Ala Asp Ala Ala Lys Pro Asn Asn Val Lys Pro Val Gln
183 145 150 155 160
184 Pro Lys Pro Ala Gln Pro Lys Thr Pro Thr Glu Gln Thr Lys Pro Val
185 165 170 175
186 Gln Pro Lys Val Glu Lys Val Lys Pro Ala Val Thr Ala Pro Ser Lys
187 180 185 190
188 Asn Glu Asn Arg Gln Thr Thr Lys Val Val Ser Ser Glu Ala Thr Lys
189 195 200 205
190 Asp Gln Ser Gln Thr Gln Ser Ala Arg Thr Val Lys Thr Thr Gln Thr
191 210 215 220
192 Ala Gln Asp Gln Asn Lys Val Gln Thr Pro Val Lys Asp Val Ala Thr
193 225 230 235 240
194 Ala Lys Ser Glu Ser Asn Asn Gln Ala Val Ser Asp Asn Lys Ser Gln
195 245 250 255
196 Gln Thr Asn Lys Val Thr Lys Gln Asn Glu Val His Lys Gln Gly Pro
197 260 265 270
198 Ser Lys Asp Ser Lys Ala Lys Glu Leu Pro Lys Thr
199 275 280
202 <210> SEQ ID NO: 5
203 <211> LENGTH: 268
204 <212> TYPE: PRT
205 <213> ORGANISM: Artificial Sequence
207 <220> FEATURE:
208 <223> OTHER INFORMATION: carboxyl His-tagged construct of SEQ ID NO: 1
210 <400> SEQUENCE: 5
211 Met Gly Thr Gln Val Ser Gln Ala Thr Ser Gln Pro Ile Asn Phe Gln
212 1 5 10 15
213 Val Gln Lys Asp Gly Ser Ser Glu Lys Ser His Met Asp Asp Tyr Met
214 20 25 30
215 Gln His Pro Gly Lys Val Ile Lys Gln Asn Asn Lys Tyr Tyr Phe Gln
216 35 40 45

```

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217 Thr Val Leu Asn Asn Ala Ser Phe Trp Lys Glu Tyr Lys Phe Tyr Asn
218      50                      55                      60
219 Ala Asn Asn Gln Glu Leu Ala Thr Thr Val Val Asn Asp Asn Lys Lys
220 65                      70                      75                      80
221 Ala Asp Thr Arg Thr Ile Asn Val Ala Val Glu Pro Gly Tyr Lys Ser
222                      85                      90                      95
223 Leu Thr Thr Lys Val His Ile Val Val Pro Gln Ile Asn Tyr Asn His
224                      100                     105                     110
225 Arg Tyr Thr Thr His Leu Glu Phe Glu Lys Ala Ile Pro Thr Leu Ala
226                      115                     120                     125
227 Asp Ala Ala Lys Pro Asn Asn Val Lys Pro Val Gln Pro Lys Pro Ala
228                      130                     135                     140
229 Gln Pro Lys Thr Pro Thr Glu Gln Thr Lys Pro Val Gln Pro Lys Val
230 145                     150                     155                     160
231 Glu Lys Val Lys Pro Thr Val Thr Thr Thr Ser Lys Val Glu Asp Asn
232                      165                     170                     175
233 His Ser Thr Lys Val Val Ser Thr Asp Thr Thr Lys Asp Gln Thr Lys
234                      180                     185                     190
235 Thr Gln Thr Ala His Thr Val Lys Thr Ala Gln Thr Ala Gln Glu Gln
236                      195                     200                     205
237 Asn Lys Val Gln Thr Pro Val Lys Asp Val Ala Thr Ala Lys Ser Glu
238                      210                     215                     220
239 Ser Asn Asn Gln Ala Val Ser Asp Asn Lys Ser Gln Gln Thr Asn Lys
240 225                     230                     235                     240
241 Val Thr Lys His Asn Glu Thr Pro Lys Gln Ala Ser Lys Ala Lys Glu
242                      245                     250                     255
243 Leu Pro Lys Thr Leu Glu His His His His His His
244                      260                     265
247 <210> SEQ ID NO: 6
248 <211> LENGTH: 395
249 <212> TYPE: PRT
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: amino His-tagged construct of SEQ ID NO: 7
255 <400> SEQUENCE: 6
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258 Gly Met Lys Glu Thr Ala Ala Ala Lys Phe Glu Arg Gln His Met Asp
259                      20                      25                      30
260 Ser Pro Asp Leu Gly Thr Asp Asp Asp Asp Lys Ala Met Gly Thr Lys
261                      35                      40                      45
262 His Tyr Leu Asn Ser Lys Tyr Gln Ser Glu Gln Arg Ser Ser Ala Met
263                      50                      55                      60
264 Lys Lys Ile Thr Met Gly Thr Ala Ser Ile Ile Leu Gly Ser Leu Val
265 65                      70                      75                      80
266 Tyr Ile Gly Ala Asp Ser Gln Gln Val Asn Ala Ala Thr Glu Ala Thr
267                      85                      90                      95
268 Asn Ala Thr Asn Asn Gln Ser Thr Gln Val Ser Gln Ala Thr Ser Gln
269                      100                     105                     110

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**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/589,381

DATE: 08/22/2006

TIME: 14:18:30

Input Set : A:\21490Y PCT SL 6 28 06.TXT

Output Set: N:\CRF4\08222006\J589381.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date